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1. TITLE

Study on Effects of Disc Dimensions and Material Properties on Damping

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3. ABSTRACT

Brake squeal is a critical issue for automotive brake systems and its propensity significantly depends on the vibrational characteristics of brake discs, such as eigen-modes and damping. The former has been arranged to avoid coupling of multi-modes within a disc and resonance with neighboring components. The latter was considered to depend mostly on the material properties of brake discs. In this study, we focused on the effects of dimensions on disc damping and carried out intensive CAE experiments for analyzing these effects. We also verified that peak vibration levels in FRF are effective for evaluating damping properties of brake discs.

4. CONTACT

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